

# MJ 100 TRAVELIFT CRANE SPECIFICATIONS

## •INDUSTRIAL APPLICATION•



**CAPACITY**.....200,000 LBS(90,719KG)

### STANDARD EQUIPMENT

Enclosed cab 16' 4" (4.98 m) eye level • Tinted glass • Windshield wiper • Adjustable bucket seat • Operating switches and gauges  
 • Noise suppression • 4 Red strobe lights • 4 Motion alarms  
 • Cummins Diesel QSB6.7 engine with grid heater • (2) dual wheel rear wheel drive • Rear wheel steer • Vivid yellow paint w/black yokes and wheels • Single trolley • Chain traverse  
 • Programmable Electronic Control System (ECS) • Electronic, stepless, infinitely variable controls for hoist, traverse and drive  
 • 18.00 x 25 Bias Ply tires • Wheel guards • Air intake pre-cleaner  
 • 8 Lights (4 work, 4 drive)

### ENGINE

Make and Model.....Tier 3 Cummins Diesel QSB6.7  
 Fuel.....No. 2 Diesel  
 No. of Cylinders.....6  
 Fuel Supply.....Bosch CP3.3 Electronic  
 Air Cleaner.....Dry Type  
 Oil Filter.....Renewable Cartridge  
 Cooling System.....Pressurized Radiator  
 Horsepower  
 Gross @ Flywheel.....260 hp @ 2200 rpm  
 194 kW @ 2200 rpm  
 Torque, maximum @ Flywheel.....728 lbs. ft. @ 1500 rpm  
 987 Nm @ 1500 rpm

### ELECTRICAL

Voltage.....24 Volt Alternator.....70 Amps  
 Batteries (2).....1000 CCA @ 0°F (-18°C) for 30sec.

### MAIN HYDRAULICS

Hoist & Traverse Pump.....2 Piston-type load sensing variable displacement  
 Hoist & Traverse Control.....Four spool sectional valve  
 Drive Pump.....Piston type over center variable displacement

### DRIVE SYSTEM

Hydrostatic on rear wheels. Four piston motors (one at each rear wheel) drive planetary gear transmissions with a roller chain to the drive sprocket at the wheels.  
 Chain.....ANSI 180

### BRAKING SYSTEM

Service.....Automatic hydrostatic braking  
 Parking.....MultiDisc "SAHR"<sup>1</sup>

### STEERING

Electrically controlled hydraulic power rear wheel steer with two double acting cylinders.

### TRAVERSE SYSTEM

Direct Chain Drive, one located on each top beam. Each traverse is individually controlled and is driven by a hydraulic motor.  
 Motor.....Radial Piston  
 Brake.....MultiDisc "SAHR"<sup>1</sup>  
 Chain.....ANSI 120

1-"SAHR" spring applied hydraulic release; Automatic Actuation; No mechanical adjustment

2-Contact factory for speeds at loads other than empty.

3-System capacity varies depending on height and width of unit.

4-Consult factory when adding magnet package.

### HOIST SYSTEM

Hoist drums are directly coupled to a planetary gearbox, one located on each top beam. Each individually controlled. Each hoist is driven by a fixed displacement piston motor integrated with a direct mounted counterbalance valve.

Motor.....Axial Piston  
 Brake.....MultiDisc "SAHR"<sup>1</sup>  
 Wire Rope.....3/4" EEIPS, Class 6x37, Warrington Seale  
 Reeving.....8 parts per top beam  
 Sheave Pitch Diameter.....19.38" (492mm)

### PERFORMANCE

Traverse Speed (Rated Capacity)  
 Speed.....60 fpm (18.3 m/min)  
 Slope.....4.0%

2 Speed Hoist  
 Rated Capacity.....17.0 fpm (5.2 m/min)  
 Empty<sup>2</sup>.....37.0 fpm (11.3 m/min)

Final Drive Ratio	Level Drive Speed at Rated Capacity		Gradeability at Rated Capacity	
	Speed		Paved Gravel	
2 Speed Drive				
2.00:1 Empty	4.9 mph (7.9 km/h)	5.6%	3.5%	
Laden	2.75 mph (4.4 km/h)	5.6%	3.5%	

### SERVICE CAPACITIES

	U.S.	METRIC
Fuel Tank	100 gals	379L
Hydraulic System <sup>3</sup>	75 to 100 gals	284 to 379L
Hydraulic Reservoir	51 gals	193L
Cooling System	33 qts	31L
Engine Oil (w/Filter)	17 qts	16L
Pump Drive Transmission	4 qts	3.8L

### OPTIONAL EQUIPMENT

Dual/split trolley (specify spacing) • Top beam widths • Column heights • Side beam lengths • Inward facing cab • Raised operator cab • Ladder safety device(s) • Transverse steer  
 • Cab heater • Engine block heater • Remote control • Open operator station under side beam • Drive camera/monitor kit  
 • Maintenance ladders and platforms for hoists • Air conditioner  
 • AC light package • Power on Demand

### ACCESSORIES

Spare tire and wheel • American tool kit (recommended for export)  
 • Filter kits (Hydraulic/engine kits available) • Export preparation  
 • Magnet package<sup>4</sup> • Spreader beams • Spare parts kit

*NOTE: MI-JACK PRODUCTS reserves the right to change specifications without notice and without incurring any obligation relating to such a change.*

# MJ100 TRAVELIFT → CRANE

## ESTIMATED SHIPPING WEIGHTS:

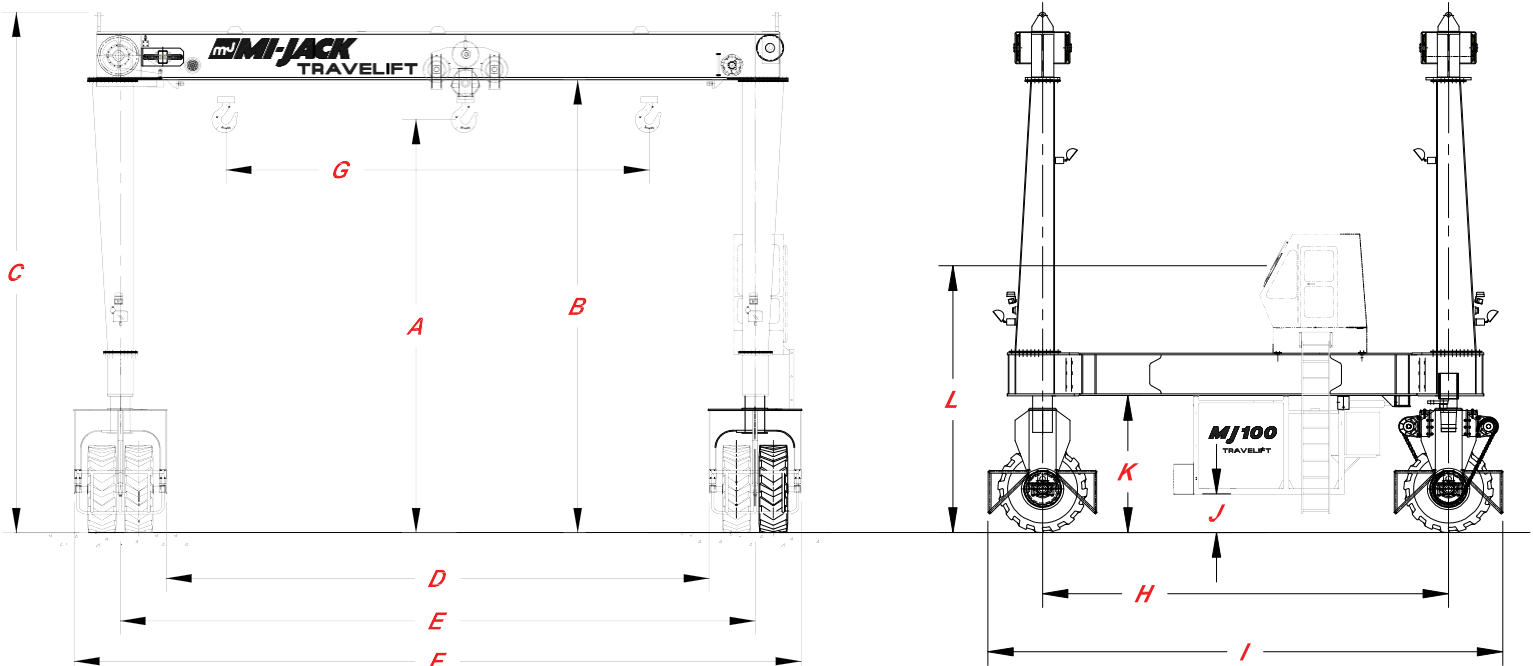
		ICW			24' 0"	WB
		40' 0"	50' 0"	60' 0"		
HK HT	25' 0"	137,417 lbs 62,331 kg	144,170 lbs 65,394 kg	150,970 lbs 68,479 kg		
	30' 0"	145,225 lbs 65,873 kg	151,978 lbs 68,936 kg	158,778 lbs 72,020 kg		
	40' 0"	149,429 lbs 67,780 kg	156,182 lbs 70,843 kg	162,982 lbs 73,927 kg		

- 1.) Add 2,950 lbs for 30' WB
- 2.) Add 7,860 lbs for 40' WB

## GROUND BEARING PRESSURE:

		ICW			24' 0"	WB
		40' 0"	50' 0"	60' 0"		
HK HT	25' 0"	119 psi 820 kPa	122 psi 841 kPa	124 psi 855 kPa		
	30' 0"	120 psi 827 kPa	122 psi 841 kPa	124 psi 855 kPa		
	40' 0"	121 psi 834 kPa	123 psi 848 kPa	126 psi 869 kPa		

## DIMENSIONAL DATA



Any combination of widths, heights, and lengths shown are available except as noted in charts. Dimensional variations may occur based upon optional equipment characteristics. All crane dimensions are capable of full capacity. Consult factory for optional dimension and ratings.

A	B	C	D	E	F	G
HEIGHT TO HK. THROAT <sup>(1)</sup>	HEIGHT TO BTM OF TP BM	OVER ALL HEIGHT	I.C.W. <sup>(2)</sup>	TREAD WIDTH	OVER ALL WIDTH AT GROUND <sup>(3)(4)</sup>	TROLLEY TRAVEL <sup>(5)</sup>
25'- 0" ( 7.62 m)	27'- 9" ( 8.46 m)	32'- 0" ( 9.57 m)	40'- 0" ( 12.19 m)	45'- 8" ( 13.92 m)	51'- 5" ( 15.67 m)	34'- 1" ( 10.39 m)
30'- 0" ( 9.14 m)	32'- 9" ( 9.98 m)	37'- 0" ( 11.28 m)	50'- 0" ( 15.24 m)	55'- 8" ( 16.97 m)	61'- 5" ( 18.72 m)	44'- 1" ( 13.44 m)
†40'- 0" ( 12.19 m)	42'- 9" ( 13.03 m)	47'- 0" ( 14.33 m)	60'- 0" ( 18.29 m)	65'- 8" ( 20.02 m)	71'- 5" ( 21.77 m)	54'- 1" ( 16.48 m)

H	I	J	K	L	
WHEELBASE & HK. CENTERS	OVER ALL LENGTH	GROUND TO ENG. FRAME	GROUND TO SIDE BEAM	OPERATOR EYE LEVEL	
24'- 0" ( 7.32 m)	30'- 5" ( 9.27 m)	1'- 6" ( 0.46 m)	8'- 2" ( 2.49 m)	Inward facing cab	16'- 4" ( 4.98 m)
30'- 0" ( 9.14 m)	36'- 5" ( 11.10 m)			Std. forward cab	16'- 4" ( 4.98 m)
40'- 0" ( 12.19 m)	46'- 5" ( 14.15 m)			High Inward facing cab	18'- 2" ( 5.54 m)

(1) Add 3" (0.08 m) for dual trolley option.

(2) Measured from face of yoke.

Subtract 2" (0.05 m) for hardware

(3) For unit with raised cab options add 15" (0.38 m) to left side clearance.

(4) Subtract 6" (0.15 m) for overall width at top.

(5) Single trolley dimensions shown,

For dual trolley, subtract (trolley spacing + 6" (0.15 m))

† Tie bar options

**NOTE:** All heights above ground include 2" tire deflection for an unloaded crane. Up to 3" additional should be deducted for tire deflection at rated load. Inside, outside and height dimensions are nominal and may vary due to manufacturing standards and structural deflection.

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